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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/811,603	03/29/2004	Patrick Joseph Corrigan	9382MX	2803

27752 7590 09/07/2005

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EXAMINER

TRAN LIEN, THUY

ART UNIT	PAPER NUMBER
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1761

DATE MAILED: 09/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/811,603

Applicant(s)

CORRIGAN, PATRICK JOSEPH

Examiner

Lien T. Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

Claims, 14,15,18,20 and 21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 14 recites the cation is calcium lactate; however, claim 8 from which claim 14 depends does not recite calcium as the cation. It is not clear how claim 14 further limits claim 8.

Claim 15 and 21 have the same problem as claim 14.

Claim 18 is vague and indefinite; it is not known what applicant intends to claim. What does applicant mean by adding a water soluble cation comprising adding a water insoluble cation. How can the same cation be both water soluble and water insoluble. The steps contradict each other.

Claim 20 has the same problem as claim 18.

Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Fan et al

Fan et al disclose a method of producing food product. The method comprises the steps of forming a dough-based food product out of cereal components, adding a calcium source to the dough-based food product and heating the dough based food product ( see col. 2 lines 45-66). Suitable sources of calcium include calcium chloride, calcium lactate ( see col. 4 lines 20-30. The cooking is done at high temperatures under high pressure.

Fan et al disclose the steps as claimed. The preamble " for reducing the level of acrylamide" does not limit the claim because the body of the claim following the preamble is self-contained and does not depend on the preamble for completeness.

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The method comprises the step of adding a water-soluble multivalent cation to a dough-based food product before heating and this is the step disclosed by Fan et al. The cation in Fan et al is not complexed or chelated. The reduction in acrylamide in claim 16 is inherent because the same step is carried out.

Claims 1-7, 16 and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Walsh et al.

Walsh et al disclose a method of forming dough-based food product. The method comprises the steps of forming a dough comprising whey protein concentrate and edible polysaccharide, adding a calcium source to the dough, forming snack pieces from the dough and cooking the pieces to form snack. The calcium source used is calcium lactate, calcium chloride. ( see col. 2 lines 27-65 and example 7 on col. 11)

The preamble " for reducing the level of acrylamide" does not limit the claim because the body of the claim following the preamble is self-contained and does not depend on the preamble for completeness. The method comprises the step of adding a water-soluble multivalent cation to a dough-based food product before heating and this is the step disclosed by Walsh et al. The cation in Walsh et al is not complexed or chelated. The claims do not exclude the extrusion-cooking step of Walsh et al. After the pieces are formed, they are dried at 180 degree F for 30 minutes; this drying causes heating of the product which is equivalent to the claimed cooking step. With respect to claim 18, it is interpreted that a water insoluble calcium is added. Walsh et al disclose the calcium can be calcium carbonate which is a water insoluble calcium and pH adjusting agent such as acid is added. ( see col. 2 lines 48-54 and col. 4 lines 8-9).

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The reduction in acrylamide in claim 16 is inherent because the same step is carried out.

Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Walsh et al .

Walsh do not disclose calcium hydroxide and lactic acid. However, they do teach that both soluble and insoluble calcium can be used. In absence of showing of criticality or unexpected result, it would have been an obvious matter of preference to use any known calcium source and acid .

Claims 1-10,14-17 are rejected under 35 U.S.C. 102(e) as being anticipated by Elder et al.

Elder et al disclose a method for reducing acrylamide in thermally processed foods. The process comprises the step of adding cation to the food product before heating. The cation can come from the group including calcium, magnesium, copper, aluminum, copper, and iron salt. The cation can be added during milling, dry mix, wet mix or other admix so that the cation is present throughout the food product. The cation is added to the dough which is formed into snack pieces and baked. Raw food processing such as processing raw potato slice to form potato chip can also be used. The cation used include calcium lactate, calcium chloride and calcium hydroxide. The acrylamdie is reduced by at least 20%, more preferably at a level of 50-95%. ( see paragraphs 0014, 0020, 0041, 0044 and 0047)

Elder et al disclose all the limitations of the cited claims. The cation in the Elder et al process is not chelated or complexed. Since Elder et al disclose the same food ingredient as claimed, it is inherent the food material comprises asparagines.

Claims 11-13,18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Elder et al.

Elder et al do not disclose the steps of claims 11-13, and adding an acid such as lactic acid as in claims 18-21.

Elder et al disclose processing raw food ingredient such as forming raw potatoes into potato flakes or potato chip ( paragraph 0020). The steps recited in claims 11-13 are conventional steps for processing raw potato into potato slices or flakes such as shown by the prior art to Baisier et al and Villagran et al already made of record. It would have been obvious to one skilled in the art to perform these steps to process the potato. It would have been obvious to fry or par-fry the potato depending on the type of product made. Elder et al teach adding the cation in a pH buffer; thus, it would have been obvious to add an acid to adjust the pH to the level wanted. In absence of criticality of unexpected result, it would have been obvious to use any type of acid.

In the response filed 6/15/05, applicant argues Fan does not anticipate claims 1-5 because the preamble limits the claims to a method of reducing acrylamide. This argument is not persuasive because the steps of the method as recited in the body of the claim is self-contained and does not depend on the preamble for completeness. Furthermore, the preamble does not limit a claim when it merely extols benefits or

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feature of the claimed invention. Fan discloses the same steps and the same ingredients as claimed; thus, it is inherent the method has the same benefit as claimed.

Applicant makes the same argument with respect to the Walsh reference, the argument is not persuasive for the same reason set forth above.

Applicant's arguments filed 6/15/05 have been fully considered but they are not persuasive.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lien T. Tran whose telephone number is 571-272-1408. The examiner can normally be reached on Tuesday, Thursday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cano Milton can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

September 2, 2005

  
LIEN TRAN  
PRIMARY EXAMINER  
